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The debate over botched executions in the USA continues, with the media seemingly littered with examples of convicted murderers gasping their last breaths over a drawn-out period, whilst the members of the gallery look on with an assortment of emotions, including distress and satisfaction. With the standard injection agents becoming increasingly difficult to obtain due to adverse publicity and pressure on manufacturers from anti-capital punishment campaigners, the people carrying out the executions are trying different cocktails of extermination agents with varying degrees of success.

In his recent book *"Gruesome Spectacles: Botched Executions and America's Death Penalty,"* Prof. Austin Sarat analysed reports from approximately 9000 US executions from 1890 to 2010 and concluded that in the region of 3% of executions have been "botched", i.e. have diverted from accepted legal protocols or standard operating procedures, and have resulted in painful or prolonged death.¹ Botch rates were 7.16% for lethal injection, 5.4% for gas chambers, 3.1% for hanging, 1.9% for electrocution, but 0% for firing squad (out of 34 cases). The primary method of execution remains lethal injection and is available in 35 US states,² but Prof Sarat's data would suggest that the executioner's bullet remains the method of choice to guarantee a botch-free execution.

Meanwhile, back at the ranch, the debate on assisted dying continues, with the second reading of the Assisted Dying Bill in the House of Lords in July 2014.³ The Bill has been proposed by the former Labour Lord Chancellor, Lord Falconer. Some heavy-hitters have also waded into the ring, in the guise of Prof Stephen Hawking, Archbishop Desmond Tutu and the former Archbishop of Canterbury, Lord Carey, lending support to the Bill.⁴ However, the disability rights campaigner and former paralympian Baroness Tanni Gray-Thompson has warned that the Bill may extend in practice to the assisted dying of disabled people, rather than the terminally ill, and that the Bill symbolises the first step along a dangerous path for those affected by disability.

One of the many ethical issues surrounding the controversial practice of surrogate parenting was recently highlighted by a case in Thailand. A 21 year old Thai woman agreed to be a surrogate mother for an Australian couple and gave birth to fraternal twins (a boy and a girl) in early 2014.⁵ The boy had Down's syndrome, the girl did not. The Australian couple who had paid for the woman's services decided to take the girl, but not the boy. They had urged the Thai mother to have an abortion when the condition was diagnosed four months into the pregnancy. Not surprisingly, their actions have met with international condemnation: separating

twins at birth, discriminating against children with Down's syndrome, recommending an abortion of twins in a woman from an impoverished background, and renegeing on an agreement are unlikely to win you many friends. As a result of the publicity generated, an internet fund has been established to help the Thai mother with unpaid medical bills for the young boy, who will require surgery for an associated cardiac defect. Ironically, the bills for his medical treatment are greater than the expenses she was paid for the pregnancy.

The Department of Health's "Genomic England" company has confirmed its 100,000 Genome project is underway, with plans to sequence 100,000 genomes in the coming four years. It is hoped that such an undertaking will result in a greater understanding of the genetics, and therefore the treatment, of many conditions including cancers and rare genetic disorders.⁶ £300 million has been allocated to the project and it is intended for 10,000 genomes to have been sequenced and analysed by the end of 2015, as one of its first milestones. Aside from the massive logistical challenge that will ensue, the usual arguments of consent, confidentiality and data protection will inevitably follow, as concerns have been raised as to the possibility of business-related organisations, including health insurance companies, obtaining this information for commercial gain. However, the Government has played down such concerns and has chosen to emphasise the medical benefits that may result from this project.

Elsewhere in the DNA universe, the plans to allow a child's parents to be "mum, dad and someone else" took a step closer with the Human Fertilisation and Embryology Authority (HFEA) announcing that three-parent babies could be delivered within two years to families whose children have been affected by mitochondrial abnormalities.⁷ Future children of such families could be created using DNA from the parents and a donor embryo, although changes in legislation will be required before these techniques can be rolled out.

If you are one of the estimated 5% of UK doctors⁸ who regularly enjoys inhaling burnt nicotine, you may decide to set your SatNav to anywhere other than Wales the next time you jump into your car and light a ciggie. That is, if you have children as passengers. The Welsh Assembly has launched a consultation exercise to establish the level of support for the proposal of banning smoking in cars when children are present. A recent study from Cardiff⁹ suggested

that approximately 1 in 10 cars in Wales carries children who are exposed to cigarette smoke in the car's confined space, and support for this scheme may therefore be high. A similar consultation is being launched in England in the coming months.

The Rail Safety and Standards Board (RSSB) has released figures that indicate a rise in the number of people being killed on British railways.¹⁰ In the year to 2013/14, 308 people were killed on railways, either by suicide or by trespassing areas of the railway system that were out of bounds. These figures are 22 higher than the previous year and represent the highest annual figures since RSSB records began ten years ago. The RSSB also announced that there were 293 cases of trains driving through red lights in so-called Signals Passed At Danger (SPADs), a rise of 43 on the previous year. Despite these statistics, rail is still widely regarded as being the safest form of land travel, even when compared with the seemingly-innocuous practice of walking.

Changes in UK drug classification were introduced on the 10th June 2014 and will affect the commonly prescribed drugs Tramadol (now Schedule 3) and Zopiclone (now Schedule 4).¹¹ The changes will extend to England, Wales and Scotland. The stimulant Khat, which is particularly used within Somali communities in London where they chew it or drink it as tea, has also just been re-classified as Class C under the Misuse of Drugs Act 1971. This went against the advice of the Government's Advisory Council on the Misuse of Drugs, who advised in January 2013 that there was insufficient evidence to ban Khat.¹² Within 24 h of the change in the law, a man was arrested in Folkestone, while boarding a Channel Tunnel train

for Calais, allegedly in possession of £15,000 of Khat.¹³ That's a very large teapot...

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